



IFW16

## RAW SEQUENCE LISTING

DATE: 08/27/2004

PATENT APPLICATION: US/09/928,796B

TIME: 09:37:10

Input Set : A:\9022-8CT.ST25.txt

Output Set: N:\CRF4\08272004\I928796B.raw

3 <110> APPLICANT: Schwartz, Margaret A.  
 4 Zhang, Fangrong  
 5 Gebb, Sarah A.  
 7 <120> TITLE OF INVENTION: METHODS OF FACILITATING VASCULAR GROWTH  
 9 <130> FILE REFERENCE: 9022-8CT  
 11 <140> CURRENT APPLICATION NUMBER: US 09/928,796B  
 12 <141> CURRENT FILING DATE: 2001-08-13  
 14 <150> PRIOR APPLICATION NUMBER: US 09/439,616  
 15 <151> PRIOR FILING DATE: 1999-11-12  
 17 <150> PRIOR APPLICATION NUMBER: US 60/108,435  
 18 <151> PRIOR FILING DATE: 1998-11-13  
 20 <160> NUMBER OF SEQ ID NOS: 15  
 22 <170> SOFTWARE: PatentIn version 3.2  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 20  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Artificial  
 29 <220> FEATURE:  
 30 <223> OTHER INFORMATION: Oligonucleotide primer  
 32 <400> SEQUENCE: 1  
 33 gtcattggcca tggctcgagta 20  
 36 <210> SEQ ID NO: 2  
 37 <211> LENGTH: 20  
 38 <212> TYPE: DNA  
 39 <213> ORGANISM: Artificial  
 41 <220> FEATURE:  
 42 <223> OTHER INFORMATION: Oligonucleotide primer  
 44 <400> SEQUENCE: 2  
 45 ctctctcgga tcttctgtgaa 20  
 48 <210> SEQ ID NO: 3  
 49 <211> LENGTH: 19  
 50 <212> TYPE: DNA  
 51 <213> ORGANISM: Artificial  
 53 <220> FEATURE:  
 54 <223> OTHER INFORMATION: Oligonucleotide primer  
 56 <400> SEQUENCE: 3  
 57 ttgaagtgc gaatgagat 19  
 60 <210> SEQ ID NO: 4  
 61 <211> LENGTH: 19  
 62 <212> TYPE: DNA  
 63 <213> ORGANISM: Artificial  
 65 <220> FEATURE:  
 66 <223> OTHER INFORMATION: Oligonucleotide primer



## RAW SEQUENCE LISTING

DATE: 08/27/2004

PATENT APPLICATION: US/09/928,796B

TIME: 09:37:10

Input Set : A:\9022-8CT.ST25.txt

Output Set: N:\CRF4\08272004\I928796B.raw

```

68 <400> SEQUENCE: 4
69 atttagagct gtctggctt 19
72 <210> SEQ ID NO: 5
73 <211> LENGTH: 21
74 <212> TYPE: DNA
75 <213> ORGANISM: Artificial
77 <220> FEATURE:
78 <223> OTHER INFORMATION: Oligonucleotide primer
80 <400> SEQUENCE: 5
81 catactgaga tggccttga g 21
84 <210> SEQ ID NO: 6
85 <211> LENGTH: 21
86 <212> TYPE: DNA
87 <213> ORGANISM: Artificial
89 <220> FEATURE:
90 <223> OTHER INFORMATION: Oligonucleotide primer
92 <400> SEQUENCE: 6
93 tctggagcca tattcatgat g 21
96 <210> SEQ ID NO: 7
97 <211> LENGTH: 27
98 <212> TYPE: DNA
99 <213> ORGANISM: Artificial
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Oligonucleotide primer
104 <400> SEQUENCE: 7
105 gaacatgaga gtacgaccac tgtcaaa 27
108 <210> SEQ ID NO: 8
109 <211> LENGTH: 27
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Oligonucleotide primer
116 <400> SEQUENCE: 8
117 ttagggcgag aaccttcag aaatctt 27
120 <210> SEQ ID NO: 9
121 <211> LENGTH: 21
122 <212> TYPE: DNA
123 <213> ORGANISM: Artificial
125 <220> FEATURE:
126 <223> OTHER INFORMATION: Oligonucleotide primer
128 <400> SEQUENCE: 9
129 gtatggaatc ctgtggcatc c 21
132 <210> SEQ ID NO: 10
133 <211> LENGTH: 21
134 <212> TYPE: DNA
135 <213> ORGANISM: Artificial
137 <220> FEATURE:
138 <223> OTHER INFORMATION: Oligonucleotide primer
140 <400> SEQUENCE: 10

```

## RAW SEQUENCE LISTING

DATE: 08/27/2004

PATENT APPLICATION: US/09/928,796B

TIME: 09:37:10

Input Set : A:\9022-8CT.ST25.txt

Output Set: N:\CRF4\08272004\I928796B.raw

```

141 tacgcagctc agtaacagtc c 21
144 <210> SEQ ID NO: 11
145 <211> LENGTH: 21
146 <212> TYPE: DNA
147 <213> ORGANISM: Artificial
149 <220> FEATURE:
150 <223> OTHER INFORMATION: Oligonucleotide primer
152 <400> SEQUENCE: 11
153 cataactgaga tggctccttga g 21
156 <210> SEQ ID NO: 12
157 <211> LENGTH: 21
158 <212> TYPE: DNA
159 <213> ORGANISM: Artificial
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Oligonucleotide primer
164 <400> SEQUENCE: 12
165 tctggagcca tcttcatgat g 21
168 <210> SEQ ID NO: 13
169 <211> LENGTH: 1086
170 <212> TYPE: DNA
171 <213> ORGANISM: Mus musculus
174 <220> FEATURE:
175 <221> NAME/KEY: CDS
176 <222> LOCATION: (64)..(993)
178 <400> SEQUENCE: 13
179 gaggctgctc aagagctgcg gttgggtcac cgcttcatgt ttctctgccg attctgggga 60
181 aag atg gca acg aat gat gct gtt ctg aag agg ctg gag cag aag ggt 108
182 Met Ala Thr Asn Asp Ala Val Leu Lys Arg Leu Glu Gln Lys Gly
183 1 5 10 15
185 gca gag gcg gat cag atc atc gaa tat ctc aag cag cag gtt gct ctt 156
186 Ala Glu Ala Asp Gln Ile Ile Glu Tyr Leu Lys Gln Gln Val Ala Leu
187 20 25 30
189 ctt aag gag aaa gca att ttg cag gca aca atg aga gaa gaa aag aaa 204
190 Leu Lys Glu Lys Ala Ile Leu Gln Ala Thr Met Arg Glu Glu Lys Lys
191 35 40 45
193 ctt cga gtt gaa aat gct aaa ctg aaa aaa gaa ata gaa gag cta aag 252
194 Leu Arg Val Glu Asn Ala Lys Leu Lys Lys Glu Ile Glu Glu Leu Lys
195 50 55 60
197 caa gag ctg att ctg gca gaa att cat aac gga gtg gag caa gtg cgt 300
198 Gln Glu Leu Ile Leu Ala Glu Ile His Asn Gly Val Glu Gln Val Arg
199 65 70 75
201 gtt cga ttg agt act cca ctg cag acg aac tgt act gct tct gaa agt 348
202 Val Arg Leu Ser Thr Pro Leu Gln Thr Asn Cys Thr Ala Ser Glu Ser
203 80 85 90 95
205 gtg gtg cag tct cca tca gta gca acc acc gcc tct cct gct aca aaa 396
206 Val Val Gln Ser Pro Ser Val Ala Thr Thr Ala Ser Pro Ala Thr Lys
207 100 105 110
209 gag cag atc aaa gcg gga gaa gaa aag aag gtg aaa gag aag act gaa 444
210 Glu Gln Ile Lys Ala Gly Glu Glu Lys Lys Val Lys Glu Lys Thr Glu

```

## RAW SEQUENCE LISTING

DATE: 08/27/2004

PATENT APPLICATION: US/09/928,796B

TIME: 09:37:10

Input Set : A:\9022-8CT.ST25.txt

Output Set: N:\CRF4\08272004\I928796B.raw

```

211          115          120          125
213 aag aaa gga gag aaa aag gag aag cag cag tcg gca gca gca agt act      492
214 Lys Lys Gly Glu Lys Lys Glu Lys Gln Gln Ser Ala Ala Ala Ser Thr
215          130          135          140
217 gac tcc aag cct atc gac gca tcg cgt ctg gat ctt cga att ggt tgt      540
218 Asp Ser Lys Pro Ile Asp Ala Ser Arg Leu Asp Leu Arg Ile Gly Cys
219          145          150          155
221 att gtt act gcc aag aag cac cct gat gca gat tca ctg tat gtg gag      588
222 Ile Val Thr Ala Lys Lys His Pro Asp Ala Asp Ser Leu Tyr Val Glu
223 160          165          170          175
225 gaa gta gat gtg gga gaa gca gcc ccg cgc acg gtc gtc agc ggg ctg      636
226 Glu Val Asp Val Gly Glu Ala Ala Pro Arg Thr Val Val Ser Gly Leu
227          180          185          190
229 gtg aat cat gtt cct cta gaa cag atg caa aat cgt atg gtg gtt tta      684
230 Val Asn His Val Pro Leu Glu Gln Met Gln Asn Arg Met Val Val Leu
231          195          200          205
233 ctc tgt aat ctg aag cct gca aag atg cgg gga gtt ctg tct caa gcc      732
234 Leu Cys Asn Leu Lys Pro Ala Lys Met Arg Gly Val Leu Ser Gln Ala
235          210          215          220
237 atg gtg atg tgt gcc agt tca cca gag aaa gtg gag att ctg gcc cct      780
238 Met Val Met Cys Ala Ser Ser Pro Glu Lys Val Glu Ile Leu Ala Pro
239          225          230          235
241 ccc aac ggg tcc gtt cct ggg gac aga att act ttt gat gct ttt cct      828
242 Pro Asn Gly Ser Val Pro Gly Asp Arg Ile Thr Phe Asp Ala Phe Pro
243 240          245          250          255
245 gga gag cct gac aag gag cta aac cct aag aag aag atc tgg gag cag      876
246 Gly Glu Pro Asp Lys Glu Leu Asn Pro Lys Lys Lys Ile Trp Glu Gln
247          260          265          270
249 atc cag cct gac ctg cac acc aat gct gag tgt gtg gcc aca tac aaa      924
250 Ile Gln Pro Asp Leu His Thr Asn Ala Glu Cys Val Ala Thr Tyr Lys
251          275          280          285
253 gga gct ccc ttt gag gtg aag ggg aag gga gtt tgc aga gcc caa acc      972
254 Gly Ala Pro Phe Glu Val Lys Gly Lys Gly Val Cys Arg Ala Gln Thr
255          290          295          300
257 atg gcc aat agt gga att aaa taagtgtct gtaactgaaa gacattggcg      1023
258 Met Ala Asn Ser Gly Ile Lys
259          305          310
261 aaaacttaaat aacaataaag agaagtgtgt ttatcactta catataaaaa aaaaaaaaaa      1083
263 aaa      1086
266 <210> SEQ ID NO: 14
267 <211> LENGTH: 310
268 <212> TYPE: PRT
269 <213> ORGANISM: Mus musculus
271 <400> SEQUENCE: 14
273 Met Ala Thr Asn Asp Ala Val Leu Lys Arg Leu Glu Gln Lys Gly Ala
274 1          5          10          15
277 Glu Ala Asp Gln Ile Ile Glu Tyr Leu Lys Gln Gln Val Ala Leu Leu
278          20          25          30
281 Lys Glu Lys Ala Ile Leu Gln Ala Thr Met Arg Glu Glu Lys Lys Leu

```

## RAW SEQUENCE LISTING

DATE: 08/27/2004

PATENT APPLICATION: US/09/928,796B

TIME: 09:37:10

Input Set : A:\9022-8CT.ST25.txt

Output Set: N:\CRF4\08272004\I928796B.raw

```

282          35          40          45
285 Arg Val Glu Asn Ala Lys Leu Lys Lys Glu Ile Glu Glu Leu Lys Gln
286          50          55          60
289 Glu Leu Ile Leu Ala Glu Ile His Asn Gly Val Glu Gln Val Arg Val
290 65          70          75          80
293 Arg Leu Ser Thr Pro Leu Gln Thr Asn Cys Thr Ala Ser Glu Ser Val
294          85          90          95
297 Val Gln Ser Pro Ser Val Ala Thr Thr Ala Ser Pro Ala Thr Lys Glu
298          100          105          110
301 Gln Ile Lys Ala Gly Glu Glu Lys Lys Val Lys Glu Lys Thr Glu Lys
302          115          120          125
305 Lys Gly Glu Lys Lys Glu Lys Gln Gln Ser Ala Ala Ala Ser Thr Asp
306          130          135          140
309 Ser Lys Pro Ile Asp Ala Ser Arg Leu Asp Leu Arg Ile Gly Cys Ile
310 145          150          155          160
313 Val Thr Ala Lys Lys His Pro Asp Ala Asp Ser Leu Tyr Val Glu Glu
314          165          170          175
317 Val Asp Val Gly Glu Ala Ala Pro Arg Thr Val Val Ser Gly Leu Val
318          180          185          190
321 Asn His Val Pro Leu Glu Gln Met Gln Asn Arg Met Val Val Leu Leu
322          195          200          205
325 Cys Asn Leu Lys Pro Ala Lys Met Arg Gly Val Leu Ser Gln Ala Met
326          210          215          220
329 Val Met Cys Ala Ser Ser Pro Glu Lys Val Glu Ile Leu Ala Pro Pro
330 225          230          235          240
333 Asn Gly Ser Val Pro Gly Asp Arg Ile Thr Phe Asp Ala Phe Pro Gly
334          245          250          255
337 Glu Pro Asp Lys Glu Leu Asn Pro Lys Lys Lys Ile Trp Glu Gln Ile
338          260          265          270
341 Gln Pro Asp Leu His Thr Asn Ala Glu Cys Val Ala Thr Tyr Lys Gly
342          275          280          285
345 Ala Pro Phe Glu Val Lys Gly Lys Gly Val Cys Arg Ala Gln Thr Met
346          290          295          300
349 Ala Asn Ser Gly Ile Lys
350 305          310
353 <210> SEQ ID NO: 15
354 <211> LENGTH: 312
355 <212> TYPE: PRT
356 <213> ORGANISM: Homo sapiens
358 <400> SEQUENCE: 15
360 Met Ala Asn Asn Asp Ala Val Leu Lys Arg Leu Glu Gln Lys Gly Ala
361 1          5          10          15
364 Glu Ala Asp Gln Ile Ile Glu Tyr Leu Lys Gln Gln Val Ser Leu Leu
365          20          25          30
368 Lys Glu Lys Ala Ile Leu Gln Ala Thr Leu Arg Glu Glu Lys Lys Leu
369          35          40          45
372 Arg Val Glu Asn Ala Lys Leu Lys Lys Glu Ile Glu Glu Leu Lys Gln
373          50          55          60
376 Glu Leu Ile Gln Ala Glu Ile Gln Asn Gly Val Lys Gln Ile Ala Phe

```

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 08/27/2004  
PATENT APPLICATION: US/09/928,796B      TIME: 09:37:11

Input Set : A:\9022-8CT.ST25.txt  
Output Set: N:\CRF4\08272004\I928796B.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12

**VERIFICATION SUMMARY**

DATE: 08/27/2004

PATENT APPLICATION: US/09/928,796B

TIME: 09:37:11

Input Set : A:\9022-8CT.ST25.txt

Output Set: N:\CRF4\08272004\I928796B.raw